

Pacheco Creek Bridge
San Felipe Road spanning Pacheco Creek
San Felipe Vicinity
Santa Clara and San Benito Counties
California

HAER No. CA-46

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Western Region
Department of the Interior
San Francisco, CA 94102

HISTORIC AMERICAN ENGINEERING RECORD

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Pacheco Creek Bridge

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Location: Spanning Pacheco Creek on San Felipe Road, 1.5 miles south of Pacheco Pass and State Highway 152, in Santa Clara County and San Benito County, California

UTM: 10.640360.4091918
Quad: San Felipe, California

Date of Construction: 1914-1915. Altered 1954, 1973.

Present Owner: Santa Clara County Transportation Agency
1555 Berger Drive
San Jose, California 95112

Present Use: Vehicular bridge

Significance: The Pacheco Creek Bridge is one of only three extant truss bridges in Santa Clara County and is the sole remaining truss bridge in San Benito County. Representing a type, period and method of construction, it was determined eligible for inclusion in the National Register of Historic Places in 1984, under Criterion C at the local level.

Historian: John W. Snyder
Consulting Architectural Historian
1372 Fitch Way
Sacramento, California 95864

HISTORY

In 1879, E. A. Sawyer petitioned Santa Clara and San Benito counties to erect the first bridge known to have spanned Pacheco Creek at this location. The bridge, a timber truss, served these counties until it was damaged by storms in 1910. It was shortly thereafter that Santa Clara County Surveyor A. M. McCray completed plans for the present bridge, according to Cooper's General Specifications for Highway Bridges, 1909 edition. The bridge was completed in 1914-15 as a joint Santa Clara/San Benito County project.

As built, the Pacheco Creek Bridge was timber-decked. In 1954, the original timber deck and stringer system were replaced by the present steel stringers, metal bridge plank deck and asphaltic concrete wearing surface. It appears that the original lattice steel railings were replaced by the present steel flex beam railing in 1973.

DESCRIPTION

The Pacheco Creek Bridge, Bridge Number 37C-351, located on San Felipe Road, 1.5 miles south of Pacheco Pass and State Highway 152, is described as a simple span, pin-connected Pratt through steel truss with steel rolled beam stringers, steel rolled beam floor beams and asphaltic concrete deck, on concrete gravity-type abutments. Its single span is 100 feet in length (total bridge length is 104 feet), 23.3 feet in width, and carries a two-lane, 20.3-foot roadway between flex beam railings, crossing Pacheco Creek at right angles (no skew). The truss provides a vertical clearance of 14 feet, 7 inches through its portals.

SIGNIFICANCE

The Pacheco Creek Bridge has a high degree of integrity of location, setting, feeling and association. Its integrity of design, materials and workmanship have been only slightly compromised by maintenance and alterations through the years. The bridge represents a type (Pratt through truss), period (early 20th century) and method of construction (shop-fabricated, field erected pin-connected steel truss). In local context, it is one of only three truss bridges remaining in Santa Clara County and is the sole remaining truss bridge in San Benito County. The bridge was determined eligible for inclusion in the National Register of Historic Places in 1984.

PROJECT INFORMATION

The proposed project will replace the Pacheco Creek Bridge, resulting in its removal. The Federal Highway Administration is the Federal agency involved, providing funding to the Santa Clara County Transportation Agency through the Highway Bridge Replacement and Rehabilitation Act. The Pacheco Creek Bridge has been given a Structural Sufficiency Rating of 8.9. A sufficiency rating below 50 warrants placement of the bridge on the Federal Bridge Replacement List. Due to its structural deficiencies and narrow width, the Pacheco Creek Bridge was placed on the Federal Bridge Replacement List in 1980. In addition, its abutment configuration constricts the flow of Pacheco Creek, reducing the already deficient hydraulic opening and increasing flow velocity. The relatively low placement of the superstructure causes its partial inundation during periods of high flow, and the lower chords of the bridge have been damaged by debris under these conditions. Horizontal and vertical approach roadway conditions restrict sight distance for the motorist and a sharp curve at the south approach is responsible for damage to a bridge endpost by vehicle impact.

The proposed project entails the replacement of the existing truss bridge within a 36-foot wide, 160-foot long, two-span continuous precast/prestressed concrete bridge. The soffit of the new bridge will be about five feet higher to improve stream flows and debris clearance. The new bridge will be located slightly to the west of the existing bridge and will be on a curved alignment; it will physically encroach on the location of the present bridge. This shift in alignment will allow avoidance of an existing row of mature eucalyptus trees. Approaches will be improved and transitions lengthened to provide safer sight distance and to enhance riding qualities. Traffic will be detoured around the construction site via local roads. The estimated cost of the project is \$655,000.

Mitigation of the adverse effect caused by removal of the Pacheco Creek Bridge will consist of the following, as set forth in a Memorandum of Agreement among the Advisory Council on Historic Preservation, the California State Historic Preservation Office and the Federal Highway Administration:

1. The Santa Clara County Transportation Agency will undertake consultation with State and local park agencies in an attempt to relocate the Pacheco Creek Bridge for adaptive reuse and preservation. In the event the bridge is relocated and ownership is transferred, the Federal Highway Administration will ensure that there are adequate conditions and restrictions regarding continued preservation, maintenance and use of the bridge. (Consultation and advertisement has taken place; to date, no positive response has been received.)

2. Prior to demolition of the Pacheco Creek Bridge or prior to its removal for relocation, the property will be recorded, so that there will be a permanent record of its existence and history. All documentation must be acceptable to the Historic American Engineering Record (HAER) prior to demolition or relocation. Copies of the documentation will be provided to the California State Historic Preservation Officer, the San Jose Historical Society, the Gilroy Historical Museum and the San Benito County Historical Society, following acceptance by HAER.

BIBLIOGRAPHY

- T. A. Comp and D. C. Jackson, Bridge Truss Types: a guide to dating and identifying, Nashville, 1977.
- P. Dixon, "Historic Property Survey," Santa Clara County Transportation Agency, San Jose, February 10, 1982.
- J. Randall, "Bridge Report, Bridge No. 37C-351," California Department of Transportation, Sacramento, May 7, 1979.